

# Project 25 Compliance Assessment Program

## Summary Test Report

Daniels Electronics VT-4E150-00-800

STR-Daniels-100007

Test Item Description	
Manufacturer	Daniels Electronics Ltd.
Manufacturer Contact	Allison McLennan
Product Name	MT-4E Transmitter VT-4E150-00-800 (136 – 174 MHz)
Installed Options	Hardware
	50149.6
	50118.8
	50154.4
	50156.6
	Firmware
	2.2.14.D.S1.33
Installed Vocoder	Enhanced Full Rate

Test Description
P25-CAB-CAI_TEST_REQ – March 2010, Section 2.2.1.1 – Project 25 Phase 1 Common Air Interface Performance Conventional Mode Operation Base Station/Repeaters

Laboratory Information	
P25 CAP Laboratory Code	P25CAP081016
Date(s) of Test	October 8, 2010
Date(s) of Issue	October 8, 2010

Informative References	
Date	Title
March 2010	P25-CAB-CAI_TEST_REQ

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.2.1.1 – Project 25 Phase 1 Common Air Interface Performance Conventional Mode Operation Base Station/Repeaters		DTR-P25CAP81016-3008UT8	
RECEIVER TESTS (N/A)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -113 dBm (Class B)	N/A1
2.1.5	Faded Reference Sensitivity	≤ -105 dBm (Class B)	N/A1
2.1.7	Adjacent Channel Rejection	≥ 60 dB (Class B)	N/A1
2.1.8	Co-Channel Rejection	≤ 9 dB	N/A1
2.1.9	Spurious Response Rejection	≥ 70 dB (Class B)	N/A1
2.1.10	Intermodulation Rejection	≥ 70 dB (Class B)	N/A1
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	N/A1
2.1.17	Late Entry Unscquelch Delay No Talk Group or Encryption Talk Group Only Encryption Only Both (on clear or encrypted channel)	≤ 125 ms ≤ 370 ms ≤ 370 ms ≤ 460 ms	N/A1
2.1.18	Receiver Throughput Delay	≤ 125 ms	N/A1
TX TESTS (406 – 470 MHz)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	≤ 67 dB	P
2.2.14	Transmitter Throughput Delay	≤ 125 ms	P
2.2.15	Frequency Deviation for C4FM High Level signal Deviation Low Level Signal Deviation	2544 Hz ≤ f <sub>dev</sub> ≤ 3111 Hz 848 Hz ≤ f <sub>dev</sub> ≤ 1037 Hz	P P
2.2.16	Modulation Fidelity	≤ 10 % (Class B)	P
2.2.18	Transient Frequency Behavior Time Interval t1 =5.0 ms Time Interval t2 = 20.0 ms Time Interval t3 = 5.0 ms	{Δf} ≤ 12.5 kHz {Δf} ≤ 6.25 kHz {Δf} ≤ 12.5 kHz	P P P

Test Case Result Definitions	
No Test Performed	-
Test Does Not Apply to the Test Object	N/A
Test Object Meets Requirements	P (Pass)
Test Object Does Not Meet Requirements	F (Fail)
Test Object is Inconclusive	I (Inconclusive)

Comments
N/A1: VT-4E150 is a modular transmitter and therefore P25-CAB-CAI P25-CAB-CAI_TEST_REQ –March 2010, Section 2.2.1.1 Receiver tests are not applicable and not supported by this module.

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**OMB NO:** 1640-0015

**EXPIRATION DATE:** 04/30/2012

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